

# SEQUENCE LISTING

<110> Egashira, Kensuke  
Inoue, Shujiro

<120> NOVEL ACTIN-RELATED CYTOSKELETAL PROTEIN  
"LACS"

<130> 082368-003100US

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<151> 2003-03-25

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<160> 2

<170> FastSEQ for Windows Version 4.0

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<211> 3302

<212> PRT

<213> Rattus rattus

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Val	Ser	Lys	Gly	His	Arg	Thr	Asp	Val	Phe	Lys	Ala	Glu	Met	Met	Ser
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Cys	Ile	Lys	Ile	Glu	Asn	Asp	Ser	Glu	Glu	Thr	Leu	Lys	Pro	Ser	Ser
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Ser	Pro	Glu	Phe	Pro	Ser	Pro	Pro	Arg	Arg	Leu	Pro	Met	Pro	Arg	Asp
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Ile	Phe	Glu	Ser	Asn	Asn	Leu	Ile	Lys	Val	Asp	Ala	Ser	His	Gln	Ile
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 Ile Thr Lys Glu Glu Ile Pro Pro Ser Asp Val Lys Thr Thr Thr Trp  
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 Leu Phe Glu Thr Thr Pro Ile His Glu Phe Asn Glu Thr Arg Ile Glu  
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 Lys Glu Glu Ile Ile Gly Lys Ser Ile Lys Glu Thr Leu Glu Asp Leu  
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 Tyr Ser Gln Arg Val Val Glu Ala Pro Gly Ile Ile Ile Glu Ala Asp  
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 Lys Arg Glu Asp Ile Leu Gly Gly Asp Val Arg Arg Thr Ile His Asn  
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 Gly Arg Gln Lys Glu His Lys Gln Ser Ala Ser Ile Ser Ser Asp Ile  
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 Gly Gln Ala Ile Glu Cys Leu Glu Lys Ala Thr Asn Thr Arg Thr Glu  
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 Ile Leu Lys Lys Glu Leu Ile Leu Asp Asp Leu Lys Thr Ser Leu Arg  
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Leu Asp Glu Ala Thr Gln Lys Ser Cys His Arg Ser Leu Thr Glu Glu		1760
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Arg Thr Glu Ala Asn Leu Pro Lys Ala Pro Lys Gly Thr Val Lys Ile		1775
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Lys Met Ser Asn Ser Glu His Arg Ala Met Lys Asn Val Leu Asp Met		1805
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Asp Asp His Met Ser Lys Tyr Val Ser Ala Ser Met Ser Arg Lys Lys		1840
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Ser Leu Lys Thr Lys Glu Ser Glu Asn Val Arg Glu Ser Lys Asp Asp		1855
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Val Ser Ser Thr Gln Ser Val Asp Lys Thr Phe Arg Lys Gln Gln Thr		1870
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Ser Tyr Ala Lys Asn Gln Lys Asn Thr Gln Asn Ile Ser Met Ser Ala		1900
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Glu Thr Gln Ser Tyr Arg Pro Asp Pro Thr Gln His Pro Val Ser Asn		1920
	1925	1930
Pro Ala Gly Glu Thr Leu Glu Met Thr Arg Asp Phe Gln Lys Gln Ala		1935
	1940	1945
Leu Ile Arg Gln Glu Lys Gln Asn Ser Asn Lys Asp Met Arg Lys Asn		1950
	1955	1960
Asp Met Gly Leu Gln Pro Leu Pro Val Gly Lys Asp Ala His Ser Ala		1965
	1970	1975
Pro Gly Val Thr Val Ser Gly Lys Asn His Lys Arg Thr Gln Ala Pro		1980
1985	1990	1995
Asp Lys Lys Gln Arg Ile Asp Val Cys Leu Glu Ser Gln Asp Phe Leu		2000
	2005	2010
Met Lys Thr Asn Thr Ser Lys Glu Leu Lys Met Ala Met Glu Arg Ser		2015
	2020	2025
Phe Asn Pro Val Asn Leu Tyr Pro Asp Cys Gly Val Lys Glu Asn Glu		2030
	2035	2040
Asp Ala Leu Pro Pro Pro Ser Pro Pro Pro Pro Pro Ser Asn Ala		2045
	2050	2055
Ser Ser Glu Ile Glu Phe Pro Leu Pro Pro Pro Pro Pro Ile Met Leu		2060
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Leu Pro Glu Lys Asn Glu Phe Pro Pro Ser Ser Pro Thr Glu Lys Ser		2080
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Arg Ala Glu Leu Glu Ser Leu Pro Thr Leu Pro Leu Pro Pro Pro Pro		2095
	2100	2105
Gly Asp Glu Lys Ser Asp Gln Glu Cys Leu Pro Thr Ser Leu Pro Pro		2110
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Pro Pro Pro Thr Ala Pro Ser Gln Pro Ala His Leu Leu Ser Ser Ser		2125
	2130	2135
Val Leu Glu His His Ser Glu Ala Phe Leu Gln Gln Tyr Ser Arg Lys		2140
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Glu Thr Leu Asp Ser His Gln Leu His Ser Gln Ala Lys Ile Leu Thr		2160
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Gly Lys Ser Pro Pro Pro Thr Leu Pro Lys Pro Lys Leu Pro Glu Arg		2175
	2180	2185
Ile Lys Ala Lys Met Ser Gln Asp Ser Pro Ser Gly Glu Leu Glu Arg		2190
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Ser Leu Ser Asp Val Glu Ile Lys Thr Thr Leu Ser Lys Asp Gln Lys		2205
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		2220

Ser Ser Leu Val Ala Glu Ser Arg Glu His Thr Glu Ala Lys Gln Glu  
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Val Phe Arg Lys Ser Leu Gly Arg Lys Gln Leu Ser Ile Ser Ser Ala  
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Asp Tyr Ala Ala Lys Ser His Gln Ser Lys Leu Gln Thr Val Pro Lys  
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Lys His Gly Gly Leu Gly Glu Phe Asp Arg Gly Asn Val Leu Gly Arg  
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2660 2665 2670  
Ile Thr Gln Lys Gln Ser Ser Phe Ser Ser Val Arg Glu Ser Gln Gln  
2675 2680 2685  
Asp Gly Glu Lys Cys Ala Ile Asn Ile Leu Glu Phe Leu Arg Lys Arg  
2690 2695 2700  
Glu Glu Leu Gln Gln Ile Leu Ser Arg Val Lys Gln Phe Glu Ala Asp

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Pro Val Trp Leu	Ile Ser Glu Glu Lys Arg Glu Tyr Gly Val Arg Val					
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Ala Met Glu Asn Asn Leu Glu Lys Val Lys Glu Glu Ile Ile His Ile						
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Lys Thr Gln Ala Glu Glu Met Leu Val His Cys Glu His Val Ile Arg						
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Thr Ala Met Met Ala Ser Gln Thr Gly Lys Gln Lys Asp Lys Pro Thr						
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His Lys Gly Thr Glu Gln Lys Glu Ser Lys Ile Val Glu Glu Lys Leu						
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Tyr Val His Lys Asp Lys Lys Asn Ser Val Ser Ser Ala Met Pro Glu						
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Lys Ala Pro Ala Thr Gln Pro Arg Val His Ser Glu Ala Arg Ala Leu						
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Asn Glu His Phe Leu Ser Val Asp Ala Phe Asp Ser Gln Ile Val Glu						
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Ser Gln Val Ala Thr Ser Ser Ser Arg Ser Ser Glu Ala Gly Arg Ser						
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